August 15, 2011

Initiative on Plug-In Electric Vehicles
Request for Supplemental Comments

This memo is in response to the Commission's July 15, 2011 request for supplemental comments pertaining to the Initiative on Plug-In Electric Vehicles (PEVs). Ameren Illinois Company is committed to fostering the effective deployment of electric vehicles in Illinois. We stand ready to provide safe and reliable service to each customer whether they be a residential at home charger, a municipality with a fleet of electric vehicles, or a private firm offering public charging service. In that sense, electric vehicle charging is no different from other electricity end use appliance used by customers. Ameren Illinois believes that the existing Commission policy and rate structures related to providing electric service apply to these customers.

The appropriate regulatory paradigm (if any) for private and public charging stations.

Ameren Illinois Company believes that the existing regulatory paradigm is sufficient. The two largest electric utilities in the state are distribution utilities. Ameren Illinois distributes power to customers requesting delivery service regardless of the choice of supplier in a geographic territory roughly the size of the State of Indiana encompassing most of downstate Illinois. Ameren Illinois does not view a public charging station any differently from any other load to be added to the system. The Company will interconnect any new facility and charge the tariff rate for delivery. The charging station owner will be permitted to take service pursuant to Ameren's power supply tariffs, either an hourly priced service (i.e., real time pricing tariff) or fixed price service, or it may elect to receive supply from a licensed Alternative Retail Electric Supplier. For a more detailed legal analysis, please see pages 3 and 4 of AIC's response to the Initial Assessment.

In order to facilitate the charging of electric vehicles that provides the maximum societal environmental and economic benefits, what modifications (if any) should be made to existing utility rates? In addition, what metering options and charges should be considered while taking into account the existence of competitive retail suppliers?

Ameren Illinois Company believes that the existing Real-Time-Pricing option provides the appropriate rate structure to achieve the maximum societal, environmental, and economic benefits from electric vehicles. A majority of customers on the Ameren distribution system (excluding those customers who receive discounted space heat rates), could see lower bills on a real time pricing program than would otherwise be incurred on the traditional fixed price tariffs. This is of course assumes customers follow price signals, which will most likely lead to off-peak charging.

Off-peak charging will aid in limiting incremental investment in the distribution system. This has the effect of limiting cost to all customers on the system, whether they participate in the program or not. Real-Time-Pricing also helps maximize environmental benefits. Customers, who respond to price signals and charge during off-peak hours, are doing so when clean energy resources tend to be providing power. Wind energy, currently the largest renewable resource, is generally working at greater capacity during the traditional off-peak hours.

As noted in AIC's Initial Assessment, except for Rate Zone I and Rate Zone III non-space heat customers, non-summer use over 800 kWh per month is discounted below the average cost of serving non-summer service. The discounted service creates a condition where the non-summer price is too low to entice customers to adopt RTP.

With this background, AIC believes the existing RTP service is best suited for PEV owners, yet we recognize that adoption of RTP will face challenges for customers receiving discounted BGS prices. Thus, we have two recommendations pertaining to existing utility rates. First, AIC, with the Commission's support, will continue to propose modifications to the discounted BGS – Basic Generation Service fixed prices to reduce, and eventually eliminate, the discounts. Second, AIC believes that as electric vehicles begin to become present in our service territory it would be beneficial to allow the Company to actively advise and provide materials to dealerships and customers about Rider RTP and how the tariff could benefit purchasers of electric vehicles.

In order to best encourage the efficient use of the distribution system through real-time-pricing incentives, Ameren Illinois will likely seek a limited waiver of Integrated Distribution Company (IDC) rules, specifically 83 III. ADM. Code 452.240(a) *Advertising, Marketing, and Customer Retention Efforts*. That section of the law specifically states that "An Integrated Distribution Company shall not promote, advertise or market with regard to the offering or provision of any retail electric supply service." Ameren Illinois Company would request to amend these restrictions considering they may frustrate AIC's ability to promote pricing options which encourage efficient use of the AIC electric distribution system.

The ultimate goal of Ameren Illinois Company is to be able to communicate to customers, primarily by way of automobile dealers, PHEV/EV owner associations and groups, and at times directly with customers (a) Pricing options available to them, (b) Potential benefits of these options to participating customers through lower bills, and (c) Benefits to all customers associated with lower total system cost. Ameren Illinois realizes that not all PEV customers will choose the real time pricing option. Nevertheless, the communication efforts will also stress the social benefits of off-peak charging, and appeal to customers social and environmental sensibilities.

Regarding metering options, Ameren Illinois does not encourage the practice of separate metering for electric vehicle charging. This would add unnecessary cost to both the customer and the utility. Metering requirements will be determined by the rate serving the customer. Customers that wish to take service with dynamic rates (whether offered by utility or RES) will require an interval meter. Additional charges for interval meters are already part of existing rates. Ameren Illinois will continue to evaluate in-home charging stations and the ability to receive and use "billing quality" usage information from those stations. Emerging technology may permit cost effective means to capture PEV only loads, which will in turn permit separate pricing for PEV usage without the need to install a separate meter.

What cost causation and rate design modifications will be required to handle distribution upgrades for increased penetration of higher voltage at-home charging?

As a threshold matter, the Company would note that based on its informed opinion, Ameren Illinois will not be subjected to a massive influx of electric vehicles in the service territory in a manner that would stress the capabilities of the system. The Company expects a gradual introduction of the vehicles to central and southern Illinois.

For residential customers purchasing an electric vehicle, the charging load should be treated like any other new load within existing terms and conditions and rate structures. In the opinion of Ameren Illinois Company, an electric vehicle is basically an appliance. The company does not have a policy of distinguishing between different types of appliances based on their demand or required voltages. In that sense, an electric vehicle is no different from an electric appliance such as a plasma television or an air conditioner. Let's assume that a customer purchases an electric vehicle which necessitates distribution upgrades, say for example a line transformer upgrade. This is no different than, speaking hypothetically, a customer who buys a large plasma television and the demand from that appliance pushes the limits of an already constrained line transformer. The strain on that transformer is a function of the sum of demands of all the customers taking service from it. In that situation, costs are distributed among all customers. This situation is no different from the previous example.

Furthermore, it can be expected that customers charging at home will provide incremental delivery service revenue to the Company. It is not necessarily given that aggregate incremental costs will be greater than incremental revenue. It may be true that the incremental revenue these customers provide could exceed the added cost of serving them, in that sense they would be paying for the cost of these upgrades.

Which costs, if any, should be socialized and why (rationale, benefits, etc.)? Assuming there are costs to be socialized, what are the proper methods for such allocation?

EV charging station load should be treated like any other new load and those costs should be allocated following established cost assignment procedures. Customer requests for new or upgraded

service should be handled through existing tariffs governing the expansion or modification of the electric system. System upgrades independent of a new or upgraded service request should be treated as normal system upgrades and cost allocation should follow the normal ratemaking process. System upgrade costs associated with increased residential at home charging should follow the established methodology for distributing costs among customers in their respective classes.

For businesses that provide public charging services, the methodology for assigning costs should be no different from current policy of assigning costs for system expansion or modification. Non-residential customers who trigger an upgrade in the facilities serving them have the costs of the upgrade weighed against the incremental delivery service revenue that the expansion will generate in the first three years following its completion (a.k.a. “The Revenue Test”). Similar to upgrades to support at home charging customers, non-residential customers can be expected to provide incremental revenue to the distribution company. Both incremental revenue and incremental cost associated with these customers will be considered in the Company’s revenue requirement needs in future rate cases.

It should be noted that costs of Ameren Illinois’ electric grid are shared today. Present rates provide for cost sharing among users of the system. This is effectuated during a rate case when the Commission takes up the Class Cost of Service Study and Rate Design recommendations of the Company and parties. It follows that these methods of ratemaking will continue to provide for cost sharing of system assets used by customers will continue.